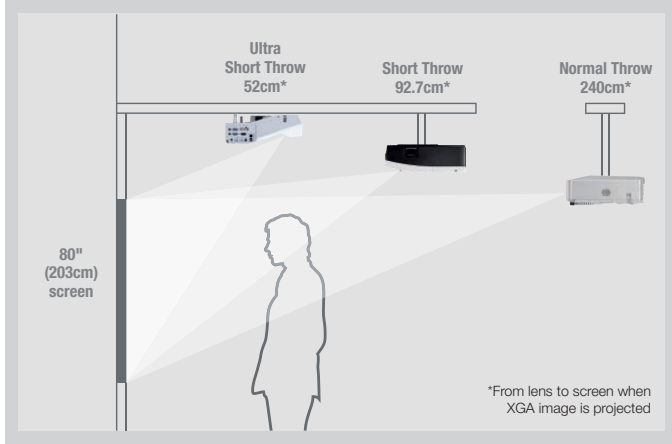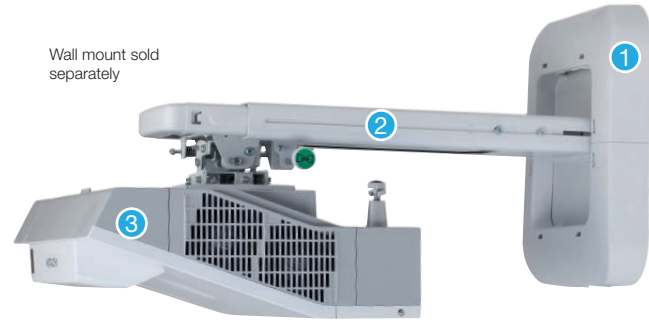## What is Ultra Short Throw?

An Ultra Short Throw projector isn't only about throw distance; it's a combination of features that make it stand out from ordinary short throw projectors. Extremely short throw distances often result in distorted and poor image quality, but not the Ultra Short Throw. Hitachi's Ultra Short Throw projector achieves the optimum balance between throw distance and image quality.

- **Ultra in picture quality**
- **Ultra in installation**
- **Ultra in connectivity**
- **Ultra in flexibility**
- **Ultra in performance features**

Ultra Short Throw 52cm* Short Throw 92.7cm* Normal Throw 240cm*

80" (203cm) screen

*From lens to screen when XGA image is projected
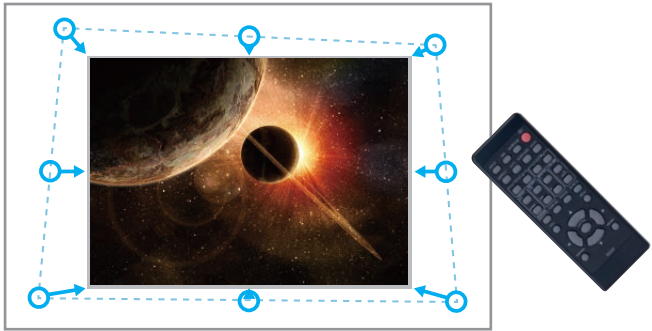
Easy installation and adjustment

The wall mount ensures that the projector can be installed in exactly the right position. The entire unit slides horizontally and fine adjustments can be made to each axis independently.

Wall mount sold separately

1. Fix wall plate to wall.
2. Fit boom to wall plate.
3. Slide projector (with bracket attached) on to boom arm.

Easy remote control installation and adjustment

Hitachi innovations extend to installation and operation features that ensure quick, easy and flexible setup. The powered focus and zoom and the eight point Perfect Fit function, all of which can be operated via the remote control, to enable rapid installation but also easy post-installation adjustment of settings.
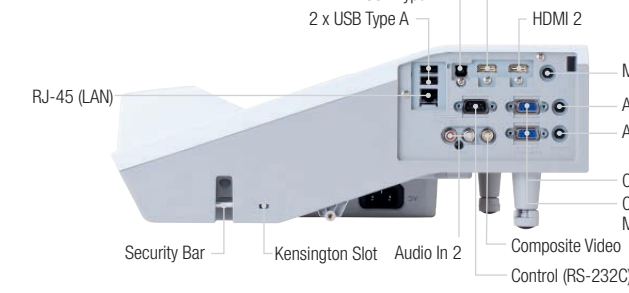
Versatile connectivity

These projectors provide a wealth of connectivity options. You can connect a variety of devices, to support all your projection needs. From DVD players and PCs to a wireless network, a Local Area Network or a simple mouse connection, Hitachi has done everything possible to ensure easy versatile connections that make your projector do more for you.

2 x HDMI input

HDMI provides completely digital connections, ensuring that lessons and presentations can be delivered with the highest image quality.

USB Type B · HDMI 1 · 2 x USB Type A · HDMI 2 · RJ-45 (LAN) · Microphone · Audio In 1 · Audio Out · Computer In 1 · Computer In 2/ Monitor out · Security Bar · Kensington Slot · Audio In 2 · Composite Video · Control (RS-232C)

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Ultra Short Throw
LCD Projectors

The ideal solution for any education or corporate environment

MODEL	CP-AX2503EF	CP-AX3003EF	CP-AX3503EF	CP-AW2503EF	CP-AW3003EF	CP-TW2503EF	CP-TW3003EF
OPTICAL							
Resolution	XGA (1024 x 768)	XGA (1024 x 768)	XGA (1024 x 768)	WXGA (1280 x 800)	WXGA (1280 x 800)	WXGA (1280 x 800)	WXGA (1280 x 800)
Light output (brightness) (Lumens)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)	3600 (Normal Mode)/2400 (Eco Mode)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)
Colour light output (colour brightness) (Lumens)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)	3600 (Normal Mode)/2400 (Eco Mode)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)	2700 (Normal Mode)/1800 (Eco Mode)	3300 (Normal Mode)/2200 (Eco Mode)
Contrast ratio	5000:1						
Lens	Powered focus, Digital zoom x 1.35						
Lamp life (hours)	3000 (Normal Mode)/5000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)	2500 (Normal Mode)/4000 (Eco Mode)
Focus distance	0.103m–0.463m (from front of projector)	0.103m–0.463m (from front of projector)	0.103m–0.463m (from front of projector)	0.126m–0.41m (from front of projector)	0.126m–0.41m (from front of projector)	0.126m–0.41m (from front of projector)	0.126m–0.41m (from front of projector)
Distance to width ratio (:1)	0.3 (fixed)						
Diagonal display size	60"–100" (152cm–254cm)						
Keystone	Fixed 7.7:-1 Upward Shift				Fixed 4.6:-1 Upward Shift		
INTERACTIVE							
Interactive system	N/A					4 Pens/4 Finger Touch (optional)	
COMPATIBILITY							
Computer compatibility	IBM Compatible VGA, SVGA, XGA, WXGA/WXGA+/SXGA/SXGA+/UXGA (compressed), MAC16"						
Composite/S-Video	NTSC, PAL, SECAM, PAL-M, PAL-N, PAL(60Hz), NTSC4.43						
Component Video	525i(480i), 525p(480p), 625i(576i), 1125i(1080i@50/60), 1125p(1080p@50/60), 750p(720p@50/60)						
HDMI	1125i(1080i@50/60), 750p(720p@50/60), 1125p(1080p@50/60)						
FEATURES							
Speaker	16W x 1 Mono						
Basic functions	Freeze, Magnifying, Blank, Auto adjustment, Reverse image, Up-side down image, Auto signal search						
Picture adjustments	Digital Zoom x 1.35, Equalising Digital Gamma Correction,2-3 pull down for NTSC, Progressive Scan, Noise reduction, Aspect selection 4:3/16:9/16:10/14:9/Native - dependant on source, Equalising colour temperature adjustment, Perfect Fit						
Digital keystone	Horizontal ±5°, Vertical ±5°						
Advanced features	Drawing function (optional wireless tablet TB-1 required), MyScreen, My Memory, My Button by remote control, My Source, My Text, Picture mode (8 modes), Source naming (English), Resolution setting, Template, Saving mode, Audio pass through, Cloning, Audio sound mixing,Audio out (standby) and monitor out/selectable source with menu, Eco Mode (Normal, Eco, Intelligent Eco, Saver), Filter timer/selectable interval time, PC-less Presentation (JPEG, PNG, BMP, GIF, AVI, MOV), Stand-by Audio, On screen installation guide, ImageCare™, iOS Connectivity						
Outward	Easy Lamp replace from Top, Rear intake air filter						
Power on & off	Direct on, Auto off, Auto Eco Mode						
Security systems	PIN Security Lock, MyScreen Password Lock, Transition Detector, My Text Password Lock, Key Lock (key pad, remote control), Kensington slot, Security bar						
Network	Configure and control projector via web browser, Failure and warning alerts via e-mail, Scheduling, My Image (still image transfer display), Displaying text data transferred via the network, Command Control via network, Crestron RoomView® (not accessible through wireless adapter), AMX Device Discovery, Projector management via SNMP, PJ Link™, Network Bridge, Network Presentation (PC still picture transfer), MAC address on side, USB Display						
OSD language options	English, French, German, Spanish, Italian, Norwegian, Dutch, Japanese, Portuguese, Simplified Chinese, Traditional Chinese, Korean, Swedish, Russian, Finnish, Polish, Turkey, Arabic, Persian, Czech, Danish, Hungarian, Romanian, Slovenian, Croatian, Greek, Lithuanian, Estonian, Latvian, Thai, Portuguese (Brazil), Indonesian, Vietnamese						
CONNECTIONS							
Digital input	2 x HDMI (HDCP compatible)						
Computer input	1 x 15-pin Mini D-sub						
Monitor output	1 x 15-pin Mini D-sub						
Video input	1 x RCA Jack (for composite)						
Audio input	1 x Stereo Mini Jack, 1 x pair RCA (L/R), 1 x Microphone Jack						
Audio output	1 x pair RCA (L/R)						
USB	2 x USB Type A, 1 x USB Type B						
Control	1 x 9-pin D-sub for RS-232C control						
Wired network	1 x RJ-45						
Wireless network	Option, IEEE801.11b/g/n ready (optional wireless adapter required)						
POWER							
Power supply	100-120V/220-240V, auto switching						
Power consumption/standby	320W/<0.3W (AC 220-240V)	350W/<0.35W (AC 220-240V)	350W/<0.35W (AC 220-240V)	350W/<0.35W (AC 220-240V)	350W/<0.35W (AC 220-240V)	350W/<0.35W (AC 220-240V)	350W/<0.35W (AC 220-240V)
PHYSICAL							
Dimensions (W x H x D)	377 x 136 x 360mm (excluding lens and feet)						
Weight	4.3Kg	4.3Kg	4.3Kg	4.3Kg	4.3Kg	<4.5Kg	<4.5Kg
Noise level	34dB Normal Mode/28dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)	36dB (Normal Mode)/29dB (Eco Mode)
Ambient temperature	Operating 0°C–40°C/ 35°C–40°C Eco Mode						
Air filter	Hybrid (up to 4000 hours)						
MISCELLANEOUS							
	Lamp indicator light, power light, ceiling mount image, rear projection image, serial number label on side, Tabletop use (optional kit TT-03 is required)						
ACCESSORIES SUPPLIED							
	Remote control with batteries, RGB cable, power cord, cable cover, security label, user manual (detail & concise), Application CD, Adapter cover						
OPTIONAL ACCESSORIES							
Replacement lamp/lamp Wattage	DT01511/225W UHP	DT01411/250W UHP	DT01411/250W UHP	DT01411/250W UHP	DT01411/250W UHP	DT01411/250W UHP	DT01411/250W UHP
Table top kit	TT-03						
Wall mount	Wall mount (HAS-WM03)						
USB wireless adapter	USB-WL-11N						
Solutions products	CS-1WL, wireless document camera, MS-1WL, wireless multifunctional swicher/scaler, HP03781 Finger touch unit (CP-TW2503EF & CP-TW3003EF Only)						
WARRANTY							
Projector/Lamp	3 Years/3 Years***	3 Years/6 Months**	3 Years/6 Months**	3 Years/6 Months**	3 Years/6 Months**	3 Years/3 Years***	3 Years/6 Months**

MIX Paper from responsible sources FSC® C100190

*The stated lamp and filter life refers to the average life expected in ideal operating conditions with usage in accordance with the manual. The majority of, but not all lamps and filters should achieve this figure. **Where a lamp fails within warranty and a replacement lamp is taken, the warranty for the replacement lamp will be a maximum of 6 months (dependent on warranty hours stated). ***Where a lamp fails within warranty and a replacement lamp is taken, the warranty for the replacement lamp will be a maximum of 3 years (dependent on warranty hours stated). HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. AMX and the AMX logo, and Device Discovery are all registered trademarks of AMX. iPad, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. The specification above and photography is for reference only and may be subject to change.

01/14

Compatible with Projector Quick Connection App

Available on the App Store

3LCD · HYBRID FILTER · HDMI · AMX · LAN · ImageCare

HITACHI Inspire the Next
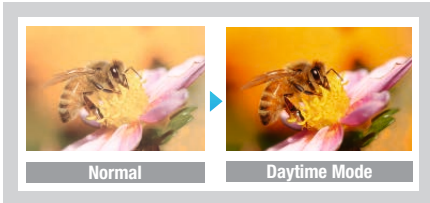
www.hitachidigitalmedia.com

Hitachi Ultra Short Throw projectors help you get the most out of your lessons or presentations.

Ultra Short LCD projectors that combine exceptional image quality and advanced features in a class-leading light, compact design that incorporates a fixed mirror. This range of Ultra Short Throw projectors offer exceptional usability and easy access to powerful features.
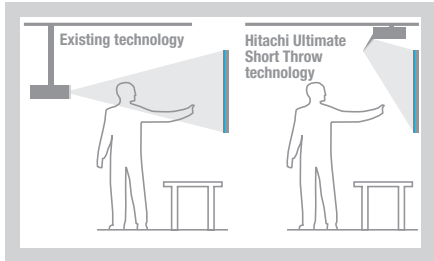
Ultra picture quality with 5000:1 high contrast ratio

Before — **After**

Normal — **Daytime Mode**

Existing technology — Hitachi Ultimate Short Throw technology

Perfect Fit
The enhanced Hitachi Perfect Fit now incorporates eight point adjustment which includes all four corners and sides. This intuitive feature helps make correcting complicated or geometric distortions caused by imperfections in screen flatness as quick as possible.

Daytime Mode
Projected images may sometimes be difficult to see under bright lighting. The Daytime Mode uses image quality correction technology to counter the effects of light, ensuring clear, vivid images.
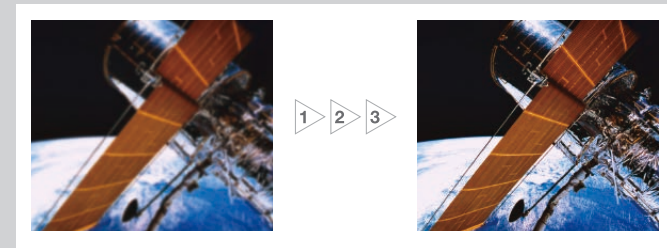
No glare or shadows
Traditional projectors dazzle people, Hitachi's unique Ultra Short Throw Technology means if you stand in front of the projector the light beam won't shine in your eyes.

Accentualizer

Hitachi original technology makes pictures look more real by enhancing (1) Sharpness, (2) Gloss and (3) Shade to make pictures as clear as pictures on a flat-panel device. You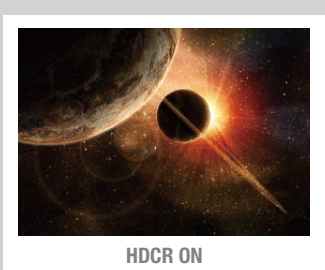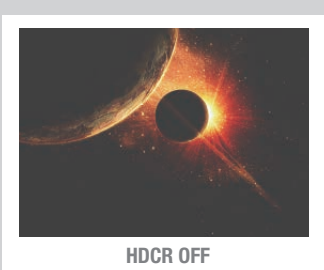 can also adjust the effects by three levels according to your surroundings so that the colours of projected images are true to life.

1 2 3

ON OFF — **Sharpness**
ON OFF — **Gloss**
ON OFF — **Shade**

HDCR (High Dynamic Contrast Range)

When average projectors are used in bright rooms, the darker colours of an image deteriorate and the image becomes less clear.
Using HDRC, blurred images caused by room lighting or outside light sources are corrected and an effect similar to increasing contrast occurs. This result is a clear image even in bright rooms.

Bright room

▼ CLEAR

HDCR OFF — **HDCR ON**

HDCR + Eco Mode
Turning HDCR ON and activating Eco Mode achieves a brightness with a look and feel close to Normal Mode while suppressing lamp brightness to the Eco Mode level and cutting electricity consumption up to approx. 30%. This results in clear images even at Normal mode.

HDCR OFF + Eco Mode ▶ **HDCR ON + Eco Mode**
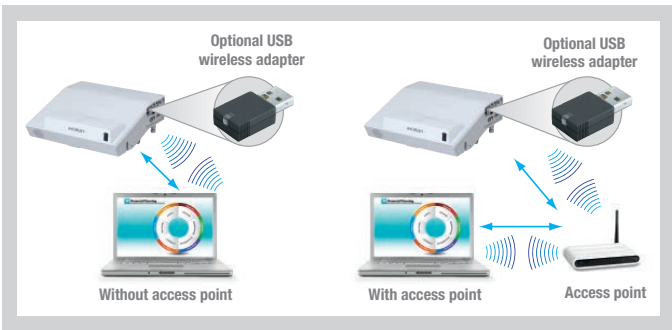
Ultra performance features

Compatible with Hitachi Solution products
All new Ultra Short Throw models are fully compatible with our innovative Hitachi Solution products*, which enhance interactivity, simplify installation and easily accommodate multiple devices with complex connections. With 2 USB type A inputs both the optional wireless adapter and one of our Solution products can be used simultaneously.

MS-1WL Wireless Multifunctional Switcher/Scaler

Finger Touch Sensor

*Compatible Solution products include: Wireless Document Camera CS-1WL, Wireless Multifunctional Switcher/Scaler MS-1WL. For further information and specifications please refer to our website www.hitachidigitalmedia.com.

Ultra wireless connectivity

Optional USB wireless adapter
Without access point — With access point — Access point

Available on the App Store

Wireless capability and network functionality
Hitachi's range of Ultra Short Throw projectors allow you to connect to your wireless network, letting you run lessons or presentations wirelessly from your laptop. The USB wireless adapter enables the projector and computer to communicate both directly or via a wireless network infrastructure. The optional USB wireless adapter supports all IEEE802.11b/g/n networks, and simply slots into place.

Smart Device Control
Plugging the USB wireless adapter into the projector and using our 'Projector Quick Connection' application, projectors can be controlled from a tablet or smartphone.
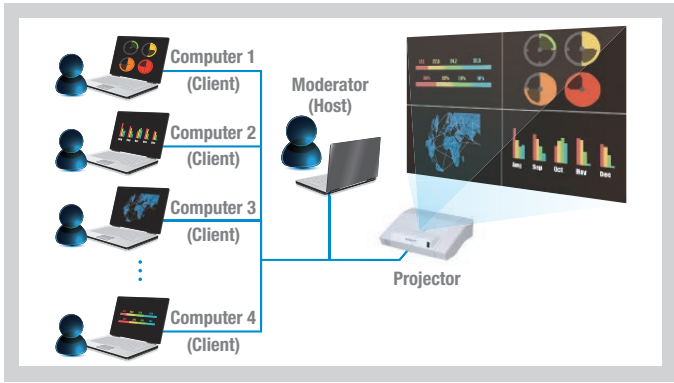
*'Our 'Projector Quick Connection' application can be downloaded from the App Store℠. iPad® application launch date planned for August 2012 and iPhone®/iPod touch® application launch planned for October 2012. Available using the following file formats: jpg, bmp, png, gif, PDF, Excel®, Word®, PowerPoint®, Keynote®, Numbers®, Pages® and Web pages. A USB wireless adaptor must be used.

Ultra network functions

The Ultra Short Throw range offers flexible networking capabilities. Administrators can conveniently schedule a variety of actions for multiple projectors on the network, including automatic Power On/Off and Centralised Reporting. The clever messenger function also allows messages to be sent to multiple projectors instantly or at a specified time.

Crestron RoomView™ Software
RoomView™ software provides a custom configurable interface to monitor, manage and control every device in every room remotely from any computer. RoomView Connected™ Projector Support Projectors with Crestron inside already connect directly to RoomView Express software. Built-in network connectivity provides instant status and remote technical support so your class or meeting is never interrupted. Broadcast messaging ensures a safe environment. Instructors can schedule all the projectors throughout the facility to turn off at the end of the day, saving energy and preserving lamps.

Network presentations
You can project still or moving images from one or more networked computers. The single PC mode lets you select one computer on the network, while the multi PC mode lets you use up to four computers.
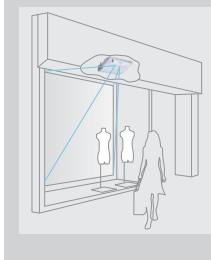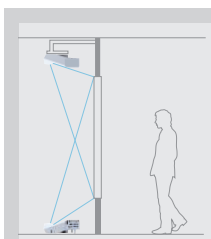
Computer 1 (Client)
Computer 2 (Client)
Computer 3 (Client)
Computer 4 (Client)
Moderator (Host)
Projector

Moderator Control Mode
The moderator controls up to 50 computers (Clients) and can select which computer is projected, up to 4.
* Moderator Control Mode supports LiveViewer 6 (Windows application) only.

Ultra flexibility

Optional table top stand TT-03

The Ultra Short Throw projectors are easy to install and flexible to use. With the optional wall mount and table top kit you can transform any existing whiteboard, wall or table top into a projected surface.
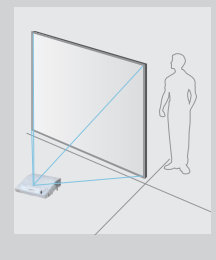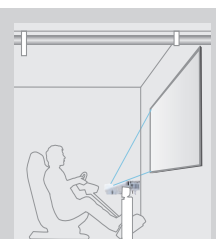
False/high ceilings
Rooms with awkward ceilings – the Ultra Short Throw projectors can be wall mounted, therefore problems relating to large voids above suspended ceilings are a thing of the past.

Entertainment
Get closer to the action than ever. Create an immersive experience by projecting large screens for gaming and videos with no shadowing effects.

Shop window
Ultra Short Throw Technology opens up a world of new possibilities in retail and digital signage applications. From shop window installations to maps in airport lounges, images can be projected on to surfaces that were never thought possible.

Rear projection
Ideal for rear projection due to the short throw distance, resulting in a clean and compact space-saving installation.

Interactive projectors (Only available on the CP-TW2503EF and CP-TW3003EF)
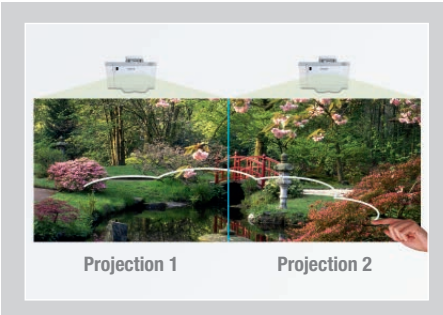
Multiple interactive pens
With up to 4 interactive pens pupils can do more than just watch – they can interact with the on-screen content. Let them enjoy providing answers, showing their understanding and becoming involved in lessons as never before.

Multi screen
For larger applications, two projectors can be combined via a single PC for continuous drawing over extended screens.

Projection 1 — Projection 2

Windows 8 multi touch
Windows 8 multi touch allow users with touch-enabled Windows 8 systems to operate the PC directly from the interactive screen with up to 4 Pens/Touch (optional) including Win8 gesture.

Hands on learning
The CP-TW2503EF and CP-TW3003EF incorporates sensors (sold separately) that detect finger touch activity on the screen area. Together with industry leading Hitachi Starboard software, it allows users to annotate and interact with the material presented. Instead of simply showing static images, students and teachers can interact with on screen material as never before, for hands-on interactivity that brings learning to life.

Auto calibration
Auto calibration is completed in 6 seconds with one button press on the remote control.

PC less drawing
PC less IWB mode, allows users to draw directly onto a picture from a document camera and other devices.
There are many photographs and templates stored within the projector, allowing users to draw directly onto pictures and templates without connecting a PC.

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